THEORETICAL AND APPLIED GENETICS

International Journal of Plant Breeding Research

Volume 95 · 1997

Managing Editor

G. Wenzel, Freising

Editorial Board

L. Alföldi, Szeged

H.C. Becker, Göttingen

J. S. Beckmann, Paris

B. S. Gill, Manhatten, KS

Yu. Gleba, Princeton, NJ

K. Glimelius, Uppsala

R. Hagemann, Halle/S.

G. E. Hart, College Station, TX

A. L. Kahler, Brookings, SD

P. Langridge, Glen Osmond, SA

H. F. Linskens, Heidelberg

F. Mechelke, Stuttgart

G. Melchers, Tübingen

R. J. Nelsen, Lima

K. Oono, Sapporo

P. L. Pfahler, Gainesville, FL

I. Potrykus, Zürich

D. R. Pring, Gainesville, FL

M. A. Saghai Maroof,

Blacksburg, VA

F. Salamini, Köln-Vogelsang

J. W. Snape, Norwich

P. M. A. Tigerstedt, Helsinki

L. Willmitzer, Golm



International Journal of Plant Breeding Research

Founded in 1929 as "Der Züchter", a German journal for theoretical and applied genetics. In 1966 its direction changed from national to international and from plant breeding to genetics and breeding research. The title changed in 1968 to "Theoretical and Applied Genetics". Edited by H. Stubbe from 1946 to 1976, by H. F. Linskens 1977 to 1987 and by G. Wenzel from 1988

TAG will publish original articles in the following areas:

- Genetic and physiological fundamentals of plant breeding
- . Applications of plant biotechnology
- Theoretical considerations in combination with experimental data

Copyright

Submission of a manuscript implies: that the work described has not been published before (except in the form of an abstract or as part of a published lecture, review, or thesis); that it is not under consideration for publication elsewhere; that its publication has been approved by all coauthors, if any, as well as by the responsible authorities at the institute where the work has been carried out: that, if and when the manuscript is accepted for publication, the authors agree to automatic transfer of the copyright to the publisher; and that the manuscript will not be published elsewhere in any language without the consent of the copyright holders.

All articles published in this journal are protected by copyright, which covers the exclusive rights to reproduce and distribute the article (e.g., as offprints), as well as all translation rights. No material published in this journal may be reproduced photographically or stored on microfilm, in electronic data bases, video disks, etc., without first obtaining written permission from the publisher.

The use of general descriptive names, trade names, trademarks, etc., in this publication, even if not specifically identified, does not imply that these names are not protected by the relevant laws and regulations.

While the advice and information in this journal is believed to be true and accurate at the date of its going to press, neither the authors, the editors, nor the publisher can accept any legal responsibility for any errors or omissions that may be made. The publisher makes no warrantly, express or implied, with respect to the material contained herein.

Special regulations for photocopies in the USA: Photocopies may be made for personal or in-house use beyond the limitations stipulated under Section 107 or 108 of U.S. Copyright Law, provided a fee is paid. All fees should be

paid to the Copyright Clearance Center, Inc., 21 Congress Street, Salem, MA 01970, USA, stating the ISSN 0040-5752, the volume, and the first and last page numbers of each article copied. The copyright owner's consent does not include copying for general distribution, promotion, new works, or resale. In these cases, specific written permission must first be obtained from the publisher.

The Canada Institute for Scientific and Technical Information (CISTI) provides a comprehensive, world-wide document delivery service for all Springer-Verlag journals. For more information, or to place an order for a copyright-cleared Springer-Verlag document, please contact Client Assistant, Document Delivery, CISTI, Ottawa K1A 0S2, Canada (Tel: 613-993-9251; Fax: 613-952-8243; e-mail: cisti. docdel@nrc.ca).

Electronic edition. An electronic edition of this journal is available via the LINK Information Service http://link.springer.de. You may contact us per e-mail access@link.springer.de or by fax +49-6221-487-288. Would you like to automatically receive per e-mail the table of contents with direct links to the respective abstracts as soon as a new issue is available via LINK? Then take advantage of our new, free service LINK Alert. For registration and further information just go to http://link.springer.de/alert.

Typesetting

Macmillan India Ltd.

Printing and bookbinding

Graphischer Betrieb K. Triltsch, Würzburg, Germany © Springer-Verlag Berlin Heidelberg 1997 Springer-Verlag GmbH & Co. KG, Berlin, Germany Printed in Germany



Table of contents Volume 95, 1997

1 - 312 published in July 1997 No. 1-2, pp. pp. 313- 508 published in August 1997 pp. 509 - 722 published in September 1997 No. 4, No. 5-6, pp. 723-1024 published in October 1997 pp. 1025-1180 published in November 1997 No. 7. pp. 1181-1334 published in December 1997 No. 8,

Achenbach LA, Patrick JA, Gray LE: Genetic homogeneity among isolates of Fusarium solani that cause soybean sudden death syndrome 474 Adkins SW → Magdalita PM Allem AC → Roa AC Almouslem AB → Bommineni VR

Alston FH → Manganaris AG Anderson OD, Greene FC: The α-gliadin gene family. II. DNA and protein sequence variation, subfamily structure, and origins of pseudogenes 59

Anderson OD, Litts JC, Greene FC: The αgliadin gene family. I. Characterization of ten new wheat α -gliadin genomic clones, evidence for limited sequence conservation of flanking DNA, and Southern analysis of the gene family 50

Angel F → Fregene M Angeles ER → Huang N Arcioni S → Calderini O Arcioni S → Crea F

Arias DM → Whitton J

Arpaia S. Mennella G. Onofaro V. Perri E. Sunseri F, Rotino GL: Production of transgenic eggplant (Solanum melongena L.) resistant to Colorado Potato Beetle (Leptinotarsa decemlineata Say) 329 Arumuganathan K → Lee J-H

Ashfaq Farooqui M, Rao AV, Jayasree T, Sadanandam A: Induction of atrazine resistance and somatic embryogenesis in Solanum melongena 702

Asíns MJ → Mestre PF Asíns MJ → Monforte AJ

Bachmann K → Friesen N Baenziger PS → Lee J-H Bakker J → Rouppe van der Voort J Bamberg JB → del Rio AH Bar-Hen A → Dillmann C

Barcaccia G, Mazzucato A, Belardinelli A, Pezzotti M, Lucretti S, Falcinelli M: Inheritance of parental genomes in progenies of Poa pratensis L. from sexual and apomictic genotypes as assessed by RAPD markers and flow cytometry 516

Barker H: Extreme resistance to potato virus V in clones in Solanum tuberosum that are also resistant to potato viruses Y and A: evidence for a locus conferring broad-spectrum potyvirus resistance 1258

Barnett RD → Pfahler PL Barret P → Chèvre AM Baudoin J-P → Maquet A

Bauer E, Weyen J, Schiemann A, Graner A, Ordon F: Molecular mapping of novel resistance genes against Barley Mild Mosaic Virus (BaMMV) 1263

Baulcombe DC \rightarrow Bendahmane A Baulcombe DC \rightarrow de Jong W

Baurens F-C, Noyer J-L, Lanaud C, Lagoda PJL: Assessment of a species-specific element (Brep 1) in banana 922

Bebeli PJ → Zhou Z Bebeli PJ, Zhou Z, Somers DJ, Gustafson JP: PCR primed with minisatellite core sequences yields DNA fingerprinting probes in wheat 276

Beck-Bunn T → Fulton TM Bedecarrats A → Gauthier P

Begu D → Kurek I Beiles A → Kato K

Belardinelli A → Barcaccia G

Bendahmane A, Kanyuka K, Baulcombe DC: High-resolution genetical and physical mapping of the Rx gene for extreme resistance to potato virus X in tetraploid potato 153

Bendahmane A → Rouppe van der Voort J

Benito C → Gallego FJ Bennett J → Huang N

Berger A → Leister D

Bernardo R: RFLP markers and predicted testcross performance of maize sister inbreds 655

Bernatzky R → Chawla B Bezděk M → Kovařik A

Bhattacharya AK → Verulkar SB

Blair MW, McCouch SR: Microsatellite and sequence-tagged site markers diagnostic for the rice bacterial leaf blight resistance gene *xa-5* 174

Blanchard P → Rebaï A

Boerma HR → Tamulonis JP

Bommineni VR. Jauhar PP. Peterson TS. Chibbar RN, Almouslem AB: Analysis of hybrids of durum wheat with Thinopyrum junceiforme using RAPD markers 757

Bones AM → Nielsen KM Bonierbale M → Fregene M Bonierbale MW → Roa AC Bonnet A → Lecouls AC Boonkrong S → Wongkaew P Börner A → Korzun V

Börner A, Röder M, Korzun V: Comparative molecular mapping of GA insensitive Rht loci on chromosomes 4B and 4D of common wheat (Triticum aestivum L.) 1133

Brabant P → David JL

Bramucci M → Gaiotto FA

Breiman A → Kurek I

Bretting PK → Cronn R

Brewbaker JL → Ming R

Brothers M → Cronn R

Brown GG → Jean M

Brown GR, Carlson JE: Molecular cytogenetics of the genes encoding 18s-5.8s-26s rRNA and 5s rRNA in two species of spruce (Picea) 1

Brun H → Chèvre AM

Bucci G, Kubisiak TL, Nance WL, Menozzi P: A population 'consensus', partial linkage map of Picea abies Karst, based on RAPD markers 643

Bucci G, Vendramin GG, Lelli L, Vicario F: Assessing the genetic divergence of Pinus leucodermis Ant. endangered populations: use of molecular markers for conservation purposes 1138

Byrne M, Murrell JC, Owen JV, Williams ER, Moran GF: Mapping of quantitative trait loci influencing frost tolerance in Eucalyptus nitens 975

Cai X, Jones S: Direct evidence for high level of autosyndetic pairing in hybrids of Thinopyrum intermedium and Th. ponticum with Triticum aestivum 568

Calderini O → Crea F

Calderini O, Pupilli F, Paolocci F, Arcioni S: A repetitive and species-specific sequence as a tool for detecting the genome contribution in somatic hybrids of the genus Medicago 734

Caligari PDS → Ur-Rahman H

Cappadocia M → Cloutier S Carbonell EA → Mestre PF

Carbonell EA → Monforte AJ

Cardi T → Conicella C

Cardin ML → David JL

Cardona C → Hartweck LM

Carlson JE → Brown GR

Carrillo JM → Nieto-Taladriz MT

Ceccarelli S → Singh M

Cerna FJ, Cianzio SR, Rafalski A, Tingey S, Dyer D: Relationship between seed yield heterosis and molecular marker heterozygosity in soybean 460

Chagué V, Mercier JC, Guénard M, Courcel A de, Vedel F: Identification of RAPD markers linked to a locus involved in quantitative resistance to TYLCV in tomato by bulked segregant analysis 671

Champagne G → Cheung WY

Chan KF, Sun M: Genetic diversity and relationships detected by isozyme and RAPD analysis of crop and wild species of Amaranthus 865

Charcosset A → Dillmann C Charcosset A → Hospital F Charne D → Cheung WY Chase CD → Kamps TL

Chavarriaga P → Fregene M

Chawla B, Bernatzky R, Liang W, Marcotrigiano M: Breakdown of self-incompatibility in tetraploid Lycopersicon peruvianum: inheritance and expression of S-related proteins 992

Chen GL → Shi CH

Chen L-F O, Kuo H-Y, Chen M-H, Lai K-N, Chen S-C G: Reproducibility of the differential amplification between leaf and root DNAs in soybean revealed by RAPD markers 1033

Chen M-H → Chen L-F O

Chen PD → Qi LL

Chen S-C G → Chen L-F O

Chen X, Temnykh S, Xu Y, Cho YG, McCouch SR: Development of a microsatellite framework map providing genome-wide coverage in rice (Oryza sativa L.) 553

Cheung WY, Champagne G, Hubert N, Tulsieram L, Charne D, Patel J, Landry BS: Conservation of S-locus for self-incompatibility in Brassica napus (L.) and Brassica oleracea (L.) 73

Chèvre AM, Barret P, Eber F, Dupuy P, Brun H, Tanguy X, Renard M: Selection of stable Brassica napus-B. juncea recombinant lines resistant to blackleg (Leptosphaeria maculans). 1. Identification of molecular markers, chromosomal and genomic origin of the introgression 1104

Chibbar RN → Bommineni VR Chin ECL → Smith JSC

Cho YG → Chen X

Choosai C → Wongkaew P

Chowdari KV → Rajebhosale MD

Chunwongse J, Doganlar S, Crossman C, Jiang J, Tanksley SD: High-resolution genetic map of the Lv resistance locus in tomato 220

Cianzio SR → Cerna FJ

Cloutier S, Cappadocia M, Landry BS: Analysis of RFLP mapping inaccuracy in Brassica napus L. 83

Cluster PD → Crea F

Coe E → Khavkin E

Collins GG → Maguire TL

Conicella C, Genualdo G, Lucia R, Ramulu KS, Cardi T: Early tapetal degeneration and meiotic defects are involved in the male sterility of Solanum commersonii (+) S. tuberosum somatic hybrids 609

Conran JG → Maguire TL

Costa P → Verhaegen D

Courcel A de → Chagué V

Couvet D → Noirot M

Craenen K, Ortiz R: Effect of the bs, gene in plantain-banana hybrids on response to black sigatoka 497

Crea F, Calderini O, Nenz E, Cluster PD, Damiani F, Arcioni S: Chromosomal and molecular rearrangements in somatic hybrids between tetraploid Medicago sativa and diploid Medicago falcata

Cregan PB → Diwan N Cregan PB → Sharon D

Cronn R, Brothers M, Klier K, Bretting PK, Wendel JF: Allozyme variation in domesticated annual sunflower and its wild relatives 532

Crossman $C \rightarrow$ Chunwongse J Crouzillat D → Lerceteau E

Damak S → Wongkaew P Damiani F → Crea F Dargatz H → Michalek W David JL, Zivy M, Cardin ML, Brabant P: Protein evolution in dynamically managed populations of wheat: adaptive responses to macro-environmental condi-

tions 932 Davis DW → Jellen EN

de Block M, Debrouwer D, Moens T: The development of a nuclear male sterility system in wheat. Expression of the barnase gene under the control of tapetum specific promoters 125

de Jong W, Forsyth A, Leister D, Gebhardt C, Baulcombe DC: A potato hypersensitive resistance gene against potato virus X maps to a resistance gene cluster on chromosome 5 246

Dean RA → Wang Y-H

Debrouwer D → de Block M

del Rio AH, Bamberg JB, Huaman Z: Assessing changes in the genetic diversity of potato gene banks. 1. Effects of seed increase 191

del Rio AH, Bamberg JB, Huaman Z, Salas A, Vega SE: Assessing changes in the genetic diversity of potato gene banks. 2. In situ vs ex situ 199

Delorme V, Keen CL, Rai KN, Leaver CJ: Cytoplasmic-nuclear male sterility in pearl millet: comparative RFLP and transcript analyses of isonuclear male-sterile lines 961

Delvaux $M \rightarrow Maquet A$

Devey ME → Emebiri LC Dillmann C, Bar-Hen A, Guérin D, Charcosset A, Murigneux A: Comparison of RFLP and morphological distances between maize Zea mays L. inbred lines. Consequences for germplasm protection purposes 92

Diwan N, Cregan PB: Automated sizing of fluorescent-labeled simple sequence repeat (SSR) markers to assay genetic variation in soybean 723

Doganlar S → Chunwongse J

Domingo J → Huang N Domon E → Fukunaga K

D'Ovidio R, Simeone M, Masci S, Porceddu E: Molecular characterization of a LMW-GS gene located on chromosome 1B and the development of primers specific for the Glu-B3 complex locus in durum wheat 1119

Drew RA → Magdalita PM

Dubcovsky J, Echaide M, Giancola S, Rousset M, Luo MC, Joppa LR, Dvorak J: Seed-storage-protein loci in RFLP maps of diploid, tetraploid, and hexaploid wheat 1169

Dubouzet JG, Shinoda K, Murata N: Phylogeny of Allium L. subgenus Rhizirideum (G. Don ex Koch) Wendelbo according to dot blot hybridization with randomly amplified DNA probes

Dupuy P → Chèvre AM Duque MC → Roa AC Dvorak J → Dubcovsky J Dyer D → Cerna FJ

Eber F → Chèvre AM Ebert I → Roth R Echaide M → Dubcovsky J Ejeta G → Tuinstra MR Elsas van JD → Nielsen KM

Elsen JM, Knott S, Le Roy P, Haley CS: Comparison between some approximate maximum-likelihood methods for quantitative trait locus detection in progeny test designs 236

Emebiri LC, Devey ME, Matheson AC, Slee MU: Linkage of RAPD markers to NESTUR, a stem growth index in radiata pine seedlings 119

Emmatty D → Fulton TM Erel N → Kurek I Eshed Y → Fulton TM Esmenjaud D → Lecouls AC Ezra D → Kurek I

Fahima T → Sun GL Falcinelli M → Barcaccia G

Fang DQ, Roose ML: Identification of closely related citrus cultivars with intersimple sequence repeat markers 408

Fang DQ, Roose ML, Krueger RR, Federici CT: Fingerprinting trifoliate orange germ plasm accessions with isozymes, RFLPs, and inter-simple sequence repeat markers 211

Farman ML → Nitta N Federici CT → Fang DQ

Ferrario S → Taramino G

Folkertsma R → Rouppe van der Voort J

Forsyth $A \rightarrow de Jong W$ Fox SL → Jellen EN

Fregene M, Angel F, Gomez R, Rodriguez F, Chavarriaga P, Roca W, Tohme J, Bonierbale M: A molecular genetic map of cassava (Manihot esculenta Crantz) 431

Frew TJ → Gilpin BJ Friebe B → Qi LL Friedt W → Snowdon RJ Friesen N. Fritsch R. Bachmann K: Hybrid origin of some ornamentals of Allium subgenus Melanocrommyum verified with GISH and RAPD 1229

Fritsch $R \rightarrow$ Friesen N

Fukui K, Shishido R, Kinoshita T: Identification of the rice D-genome chromosomes by genomic in situ hybridisation 1239

Fukunaga K, Domon E, Kawase M: Ribosomal DNA variation in foxtail millet, Setaria italica (L.) P. Beauv., and a survey of variation from Europe and Asia 751

Fuller JD → Russell JR

Fulton TM, Beck-Bunn T, Emmatty D, Eshed Y, Lopez J, Petiard V, Uhlig J, Zamir D, Tanksley SD: QTL analysis of an advanced backcross of Lycopersicon peruvianum to the cultivated tomato and comparisons with QTLs found in other wild species 881

Fulton TM, Nelson JC, Tanksley SD: Introgression and DNA marker analysis of Lycopersicon peruvianum, a wild relative of the cultivated tomato, into Lycopersicon esculentum, followed through three successive backcross generations 895

Gaiotto FA, Bramucci M, Grattapaglia D: Estimation of outcrossing rate in a breeding population of Eucalyptus urophylla with dominant RAPD and AFLP mark-

Galiba G, Kerepesi I, Snape JW, Sutka J: Location of a gene regulating coldinduced carbohydrate production on chromosome 5A of wheat 265

Gallais $A \rightarrow Hospital F$

Gallego FJ, Benito C: Genetic control of aluminium tolerance in rye (Secale cereale L.) 393 Gamborg OL → Sathish P

Gauthier P, Lumaret R, Bedecarrats A: Chloroplast-DNA variation in the genus Lotus (Fabaceae) and further evidence regarding the maternal parentage of Lotus corniculatus L. 629

Gebhard F → Nielsen KM Gebhardt C → de Jong W

Gebhardt C → Leister D

Gentzbittel I → Vear F

Genualdo G → Conicella C

Gepts P → Menéndez CM

Geuna F, Hartings H, Scienza A: Discrimination between cultivars of Vitis vinifera based on molecular variability concerning 5' untranslated regions of the StSy-CHS genes 375

Giancola S → Dubcovsky J

Giddings G, Mytton L, Griffiths M, McCarthy A, Morgan C, Skøt L: A secondary effect of transformation in Rhizobium leguminosarum transgenic for Bacillus thuringiensis subspecies tenebrionis δ -endotoxin (cryIIIA) genes 1062

Gill BS → Jellen EN

Gill BS \rightarrow Qi LL

Gilpin BJ, McCallum JA, Frew TJ, Timmerman-Vaughan GM: A linkage map of the pea (Pisum sativum L.) genome containing cloned sequences of known function and expressed sequence tags (ESTs) 1289

Gion JM → Verhaegen D Giovannoni JJ → Yen HC

Giroux MJ, Morris CF: A glycine to serine change in puroindoline b is associated with wheat grain hardness and low levels of starch-surface friabilin 857

Gnanamanickam SS → Rajebhosale MD Godwin ID → Magdalita PM

Goldsbrough PB → Tuinstra MR

Gomez R → Fregene M

Gopal J: Progeny selection for agronomic characters in early generations of a potato breeding programme 307

Grama A → Sun GL Grando S → Singh M

Graner A → Bauer E

Grattapaglia D → Gaiotto FA

Gray LE → Achenbach LA Greene FC → Anderson OD

Griffiths M → Giddings G

Grumet R → Kabelka E

Guénard M → Chagué V Guérin D → Dillmann C

Gupta VS → Rajebhosale MD

Gustafson JP → Bebeli PJ

Gustafson JP → Zhou Z

Hadonou AM → Ur-Rahman H

Haley CS → Elsen JM

Hall AE → Menéndez CM

Hamon S → Noirot M

Han F, Ullrich SE, Kleinhofs A, Jones BL, Hayes PM, Wesenberg DM: Fine structure mapping of the barley chromosome-1 centromere region containing maltingquality QTLs 903

Hanada K → Hisatomi Y

Hanboonsong Y → Wongkaew P

Hartings H → Geuna F

Hartweck LM, Cardona C, Osborn TC: Bruchid resistance of common bean lines having an altered seed protein composition 1018

Hartweck LM, Osborn TC: Altering protein composition by genetically removing phaseolin from common bean seeds containing arcelin or phytohemagglutinin 1012

Harushima Y → Yano M

Hatz BG → Russell JR

Hayes PM → Han F

Hayward MD → Ortiz JPA

He $S \rightarrow Jia MH$

Hillel J → Sharon D

Hisatomi Y, Hanada K, Iida S: The retrotransposon RTip1 is integrated into a novel type of minisatellite, MiniSip1, in the genome of the common morning glory and carries another new type of minisatellite, MiniSip2 1049

Hisatomi Y, Yoneda Y, Kasahara K, Inagaki Y, Iida S: DNA rearrangements at the

region of the dihydroflavonol 4-reductase gene for flower pigmentation and incomplete dominance in morning glory carrying the mutable flaked mutation 509

Hittalmani S → Zhuang J-Y

Hongtrakul V, Huestis GM, Knapp SJ: Amplified fragment length polymorphisms as a tool for DNA fingerprinting sunflower germplasm: genetic diversity among oilseed inbred lines

Hontelez J → Liharska TB

Hoogendoorn J → Janssen GJW Hospital F, Moreau L, Lacoudre F, Charcosset A, Gallais A: More on the efficiency of marker-assisted selection

Howard LR → Yen HC

1181

Hsam SLK → Huang X Q

Huaman Z → del Rio AH

Huang N, Angeles ER, Domingo J, Magpantay G, Singh S, Zhang G, Kumaravadivel N, Bennett J, Khush GS: Pyramiding of bacterial blight resistance genes in rice: marker-assisted selection using RFLP and PCR 313

Huang N → Yang D

Huang N → Zhuang J-Y

Huang X Q, Hsam SLK, Zeller FJ: Chromosomal location of genes for resistance to powdery mildew in common wheat (Triticum aestivum L. em. Thell.) 4. Gene Pm24 in Chinese landrace Chiyacao 950

Huang Y → Raja RG Hubert N → Cheung WY

Huestis GM → Hongtrakul V Hussain SW, Williams WM: Development

of a fertile genetic bridge between Trifolium ambiguum M. Bieb. and T. repens L. 678

Hussain SW, Williams WM, Mercer CF, White DWR: Transfer of clover cyst nematode resistance from Trifolium nigrescens Viv. to T. repens L. by interspecific hybridisation 1274

Hussey RS → Tamulonis JP Hutten R → Rouppe van der Voort J

Iida S → Hisatomi Y Inagaki Y → Hisatomi Y

Jacobsen E → Metz PLJ

Jacobsen E → Rouppe van der Voort J

Jacquemin JM → Mingeot D

Jahoor A → Michalek W

Jahoor A → Russell JR

James DJ → Ur-Rahman H

Janse BJH → Prins R

Janssen GJW, van Norel A, Verkerk-Bakker B, Janssen R, Hoogendoorn J: Introgression of resistance to root-knot nematodes from wild Central American Solanum species into S. tuberosum ssp. tuberosum 490

Janssen R → Janssen GJW

Janssen R → Rouppe van der Voort J

Jauhar PP → Bommineni VR

Jayasree T → Ashfaq Farooqui M

Jean M, Brown GG, Landry BS: Genetic mapping of nuclear fertility restorer genes for the 'Polima' cytoplasmic male sterility in canola (Brassica napus L.) using DNA markers 321

Jellen EN, Rines HW, Fox SL, Davis DW, Phillips RL, Gill BS: Characterization of 'Sun II' oat monosomics through Cbanding and identification of eight new 'Sun II' monosomics 1190

Jia MH, He S, Vanhouten W, Mackenzie S: Nuclear fertility restorer genes map to the same linkage group in cytoplasmic male-sterile bean 205

Jiang $J \rightarrow$ Chunwongse J

Jones BL → Han F

Jones $S \rightarrow Cai X$

Joppa LR → Dubcovsky J

Joshi CP, Klueva NY, Morrow KJ, Nguyen HT: Expression of a unique plastid-localized heat-shock protein is genetically linked to acquired thermotolerance in wheat 834

Jung C → Schondelmaier J

Kabelka E, Ullah Z, Grumet R: Multiple alleles for zucchini yellow mosaic virus resistance at the zym locus in cucumber

Kaeppler SM: Power analysis for quantitative trait locus mapping in populations derived by multiple backcrosses 618

Kaeppler SM: Quantitative trait locus mapping using sets of near-isogenic lines: relative power comparisons and technical considerations 384

Kameya $T \rightarrow Kanno A$

Kammen van A → Liharska TB

Kamps TL, Chase CD: RFLP mapping of the maize gametophytic restorer-of-fertility locus (rf3) and aberrant pollen transmission of the nonrestoring rf3 allele 525

Kanno A, Lee Y-O, Kameya T: The structure of the chloroplast genome in members of the genus Asparagus 1196

Kanyuka K → Bendahmane A

Kanyuka K → Rouppe van der Voort J

Kasahara K → Hisatomi Y

Kato K, Mori Y, Beiles A, Nevo E: Geographical variation in heading traits in wild emmer wheat, Triticum dicoccoides. I. Variation in vernalization response and ecological differentiation 546

Kawasaki S → Komatsuda T

Kawase M → Fukunaga K

Keen CL → Delorme V

Kerepesi I → Galiba G

Khavkin E, Coe E: Mapped genomic locations for developmental functions and QTLs reflect concerted groups in maize (Zea mays L.) 343

Khush GS → Huang N

Kinoshita T → Fukui K

Kinoshita T → Rahman SM

Kishima Y, Yamashita S, Mikami T: Immobilized copies with a nearly intact structure of the transposon Tam3 in Antirrhinum majus: implications for the cis-ele-

ment related to the transposition 1246 Kitchareonpanya R → Wongkaew P

Kleine M → Michalek W

Kleinhofs A → Han F

Klier K → Cronn R

Klueva NY → Joshi CP

Knapp SJ → Hongtrakul V

Knott $S \rightarrow Elsen JM$

Köhler A → Snowdon RJ

Köhler W → Snowdon RJ

Komatsuda T, Kawasaki S, Nakamura I, Takaiwa F, Taguchi-Shiobara F, Oka S: Identification of random amplified polymorphic DNA (RAPD) markers linked to the v locus in barley, Hordeum vulgare L. 637

Komatsuda T → Taguchi-Shiobara F Koornneef M → Liharska TB

Korol AB → Sun GL

Korzun V → Börner A

Korzun V, Malyshev S, Voylokov A, Börner A: RFLP-based mapping of three mutant loci in rye (Secale cereale L.) and their relation to homoeologous loci within the Gramineae 468

Koukalová B → Kovařik A

Kovařik A, Koukalová B, Bezděk M, Opatrný Z: Hypermethylation of tobacco heterochromatic loci in response to osmotic stress 301

Kremer A → Verhaegen D

Kresovich S → Smith JSC

Krueger RR → Fang DQ

Kubisiak TL → Bucci G

Kuittinen H, Sillanpää MJ, Savolainen O: Genetic basis of adaptation: flowering time in Arabidopsis thaliana 573

Kumar $A \rightarrow Mohan M$

Kumaravadivel N → Huang N

Kuo H-Y → Chen L-F O

Kurata N → Yano M

Kurek I, Ezra D, Begu D, Erel N, Litvak S, Breiman A: Studies on the effects of nuclear background and tissue specificity on RNA editing of the mitochondrial ATP synthase subunits α , 6 and 9 in fertile and cytoplasmic male-sterile (CMS) wheat 1305

Kusaba M → Nishio T

Kusharska M → Sharon D

Lacoudre $F \rightarrow Hospital F$

Ladizinsky G: Dwarfing genes in the genus Lens Mill. 1270

Lagoda PJL → Baurens F-C

Lahav E → Sharon D

Lai K-N → Chen L-F O

Lanaud C → Baurens F-C

Landry BS → Cheung WY

Landry BS → Cloutier S

Landry BS → Jean M

Lavi U → Sharon D

Le Roy P → Elsen JM

Leaver CJ → Delorme V

Leblanc O → Ortiz JPA

Lecouls AC, Salesses G, Minot JC, Voisin R, Bonnet A, Esmenjaud D: Spectrum of the Ma genes for resistance to Meloidogyne spp. in Myrobalan plum 1325

Lee J-H, Yen Y, Arumuganathan K, Baenziger PS: DNA content of wheat monosomics at interphase estimated by flow cytometry 1300

Lee $M \rightarrow Taramino G$

Lee S → Yen HC

Lee Y-O → Kanno A

Lehmann W → Leister D

Leister D, Berger A, Thelen H, Lehmann W. Salamini F. Gebhardt C: Construction of a potato YAC library and identification of clones linked to the disease resistance loci R1 and Gro1 954

Leister D → de Jong W

Lelli $L \to Bucci G$

Leong SA → Nitta N

Lerceteau E, Robert T, Pétiard V, Crouzillat D: Evaluation of the extent of genetic variability among Theobroma cacao accessions using RAPD and RFLP markers 10

Li HB → Liu KD

Li HB, Wang J, Liu AM, Liu KD, Zhang Q, Zou JS: Genetic basis of low-temperature-sensitive sterility in indica-japonica hybrids of rice as determined by RFLP analysis 1092

Li XH → Liu KD

Liang W → Chawla B

Liharska TB, Hontelez J, Kammen van A, Zabel P, Koornneef M: Molecular mapping around the centromere of tomato chromosome 6 using irradiation-induced deletions 969

Lin H-X → Zhuang J-Y

Lin SY → Taguchi-Shiobara F

Lindgren D → Zheng YQ

Litts JC → Anderson OD

Litvak S → Kurek I

Liu AM → Li HB

Liu AM → Liu KD Liu DJ → Qi LL

Liu KD \rightarrow Li HB

Liu KD, Wang J, Li HB, Xu CG, Liu AM, Li XH, Zhang Q: A genome-wide analysis of wide compatibility in rice and the precise location of the S_5 locus in the molecular map 809

Liu KD → Zhang Q

Lopez J → Fulton TM

Lu J → Zhuang J-Y

Lucia R → Conicella C

Lucretti S → Barcaccia G

Lumaret R → Gauthier P

Luo MC → Dubcovsky J

Luzzi BM → Tamulonis JP

Macaulay M → Russell JR Mackenzie $S \rightarrow Jia MH$

Magdalita PM, Drew RA, Adkins SW, Godwin ID: Morphological, molecular and cytological analyses of Carica papaya × C. cauliflora interspecific hybrids 224

Magpantay G → Huang N

Maguire TL, Conran JG, Collins GG, Sedgley M: Molecular analysis of interspecific and intergeneric relationships of Banksia using RAPDs and non-coding chloroplast DNA sequences 253

Malvar RA → Revilla P

Malyshev S → Korzun V

Manganaris AG, Alston FH: Genetics of superoxide dismutase in apple 484

Maquet A, Zoro Bi I, Delvaux M, Wathelet B, Baudoin J-P: Genetic structure of a Lima bean base collection using allozyme markers 980

Marais $AS \rightarrow Prins R$

Marais GF → Prins R

Marchetti $S \rightarrow Vischi M$ Marcotrigiano $M \rightarrow Chawla B$

Martínez MC → Nieto-Taladriz MT

Masci S → D'Ovidio R

Matheson AC → Emebiri LC

Maya MM → Roa AC

Mazzella C → Pillay M

Mazzucato A → Barcaccia G

McCallum JA → Gilpin BJ

McCarthy A → Giddings G

McCouch SR → Blair MW

McCouch $SR \rightarrow Chen X$

McMullen MD → Ming R

Menéndez CM, Hall AE, Gepts P: A genetic linkage map of cowpea (*Vigna unguiculata*) developed from a cross between two inbred, domesticated lines 1210

Mennella $G \rightarrow \text{Arpaia } S$

Menozzi P → Bucci G

Mercer CF → Hussain SW

Mercier JC → Chagué V

Mestre PF, Asíns MJ, Carbonell EA, Navarro L: New gene(s) involved in the resistance of *Poncirus trifoliata* (L.) Raf. to citrus tristeza virus 691

Mestre PF, Asíns MJ, Pina JA, Navarro L: Efficient search for new resistant genotypes to the citrus tristeza closterovirus in the orange subfamily Aurantioideae 1282

Mestries E → Vear F

Metz PLJ, Jacobsen E, Nap JP, Pereira A, Stiekema WJ: The impact on biosafety of the phosphinothricin-tolerance transgene in inter-specific *B. rapa×B. napus* hybrids and their successive backcrosses 442

Mhameed $S \rightarrow Sharon D$

Michalek W, Kleine M, Dargatz H, Wenzel G, Jahoor A: Stability of *Hor1*-specific YAC-clones and physical mapping of *Hor1*-loci in barley 369

Mikami T → Kishima Y

Milach SCK, Rines HW, Phillips RL: Molecular genetic mapping of dwarfing genes in oat 783

Ming R, Brewbaker JL, Pratt RC, Musket TA, McMullen MD: Molecular mapping of a major gene conferring resistance to maize mosaic virus 271

Mingeot D, Jacquemin JM: A wheat cDNA coding for a thaumatin-like protein reveals a high level of RFLP in wheat 822

Minobe Y → Yano M

 $Minot\ JC \to Lecouls\ AC$

Mitchell SE → Smith JSC

Mochizuki K → Motohashi R

Moens T → de Block M

Mohan M, Sathyanarayanan PV, Kumar A, Srivastava MN, Nair S: Molecular mapping of a resistance-specific PCR-based marker linked to a gall midge resistance gene (*Gm4t*) in rice 777

Monforte AJ, Asíns MJ, Carbonell EA: Salt tolerance in *Lycopersicon* species. V. Does genetic variability at quantitative trait loci affect their analysis? 284

Monforte AJ, Asíns MJ, Carbonell EA: Salt tolerance in *Lycopersicon* species VI. Genotype-by-salinity interaction in quantitative trait loci detection: constitutive and response OTLs 706

Moran GF → Byrne M

 $Moreau \ L \to Hospital \ F$

Morgan C → Giddings G

Mori Y → Kato K

Morris CF → Giroux MJ

Morrow KJ → Joshi CP

Motohashi R, Mochizuki K, Ohtsubo H, Ohtsubo E: Structures and distribution of *p-SINE1* members in rice genomes 359

Mouzeyar $S \rightarrow Vear F$ Murata $N \rightarrow Dubouzet JG$

Murigneux A → Dillmann C

Murrell JC → Byrne M

Musket TA → Ming R

Mytton L → Giddings G

Nabors MW → Sathish P

Nagamura Y → Yano M

Nair $S \rightarrow Mohan M$

Nakamura I → Komatsuda T

Nance WL → Bucci G

Nandi S → Yang D

Nap JP → Metz PLJ

Nath $P \rightarrow Sane AP$

Navarro L → Mestre PF

Nelson JC → Fulton TM

Nenz $E \rightarrow Crea F$

Nevo $E \rightarrow Kato K$

Nevo $E \rightarrow Sun GL$

Nguyen HT → Joshi CP

Nicolas P → Vear F

Nielsen KM, Gebhard F, Smalla K, Bones AM, Elsas van JD: Evaluation of possible horizontal gene transfer from transgenic plants to the soil bacterium *Acinetobacter calcoaceticus* BD413 815

Nieto-Taladriz MT, Ruiz M, Martínez MC, Vázquez JF, Carrillo JM: Variation and classification of B low-molecular-weight glutenin subunit alleles in durum wheat 1155

Nishio T, Kusaba M, Sakamoto K, Ockendon DJ: Polymorphism of the kinase domain of the S-locus receptor kinase gene (*SRK*) in *Brassica oleracea* L. 335

Nitta N, Farman ML, Leong SA: Genome organization of *Magnaporthe grisea*: integration of genetic maps, clustering of transposable elements and identification of genome duplications and rearrangements 20

Noirot M, Couvet D, Hamon S: Main role of self-pollination rate on reproductive allocations in pseudogamous apomicts

Noyer J-L → Baurens F-C

Nyman M, Waara S: Characterisation of somatic hybrids between *Solanum tuberosum* and its frost-tolerant relative *Solanum commersonil* 1127

Ocampo B \rightarrow Singh KB Ockendon DJ \rightarrow Nishio T Ohtsubo E \rightarrow Motohashi R Ohtsubo H \rightarrow Motohashi R Oka S \rightarrow Komatsuda T Oka S \rightarrow Taguchi-Shiobara F Onofaro V \rightarrow Arpaia S Opatrný Z \rightarrow Kovařik A Ordás A \rightarrow Revilla P Ordon F \rightarrow Bauer E Ortiz JPA, Pessino SC, Leblanc O, Hay-

ward MD, Quarín CL: Genetic fingerprinting for determining the mode of reproduction in *Paspalum notatum*, a subtropical apomictic forage grass 850

Ortiz R \rightarrow Craenen K Osborn TC \rightarrow Hartweck LM Owen JV \rightarrow Byrne M

Paolocci F → Calderini O

Parco $A \rightarrow Yang D$

Parrott WA → Tamulonis JP

Patel $J \rightarrow Cheung WY$

Patrick JA → Achenbach LA

Pe' ME → Taramino G

Pereira A \rightarrow Metz PLJ Pereira MJ \rightarrow Pfahler PL

Perret D → Rebaï A

Perri E → Arpaia S

Pessino SC → Ortiz JPA

Peterson TS → Bommineni VR

Petiard V → Fulton TM

Pétiard V → Lerceteau E

Pezzotti M → Barcaccia G

Pfahler PL, Pereira MJ, Barnett RD: Genetic variation for *in vitro* sesame pollen germination and tube growth 1218

Philippon $J \rightarrow Vear F$

Phillips RL → Jellen EN

Phillips RL → Milach SCK

Pillay M, Mazzella C: Chloroplast genome differences between *Paspalum dilatatum*Poir and the related species *P. notatum*Flugge 696

Pina JA → Mestre PF

Plomion C → Verhaegen D

Poitel M → Verhaegen D

Porceddu E → D'Ovidio R

Powell W \rightarrow Russell JR

Pratt RC \rightarrow Ming R Pretorius ZA \rightarrow Prins R

Price AH, Tomos AD: Genetic dissection of root growth in rice (*Oryza sativa* L.). II. mapping quantitative trait loci using

molecular markers 143
Price AH, Tomos AD, Virk DS: Genetic dissection of root growth in rice

dissection of root growth in rice (*Oryza sativa* L.) I: a hydrophonic screen 132

Price AH, Tomos AD, Virk DS: Genetic dissection of root growth in rice (Oryza sativa L.) 1: a hydroponic screen 95:132–142 (1997) 1024

Prins R, Marais GF, Pretorius ZA, Janse BJH, Marais AS: A study of modified forms of the Lr19 translocation of common wheat 424

Pupilli F → Calderini O

Qi LL, Wang SL, Chen PD, Liu DJ, Friebe B, Gill BS: Molecular cytogenetic analysis of Leymus racemosus chromosomes added to wheat 1084

Qi X → Schut JW Qian H-R → Zhuang J-Y

Quarín CL → Ortiz JPA

Rafalski A → Cerna FJ Rahman SM, Takagi Y, Kinoshita T: Genetic control of high stearic acid content in seed oil of two soybean mutants 772 Rai KN → Delorme V

Raja RG, Tauer CG, Wittwer RF, Huang Y: Segregation and linkage relationships of isoenzymes in shortleaf pine (Pinus echinata Mill.) 1252

Rajebhosale MD, Chowdari KV, Ramakrishna W, Tamhankar SA, Gupta VS, Gnanamanickam SS, Ranjekar PK: DNA fingerprinting of Indian isolates of Xanthomonas oryzae pv. oryzae 103

Ramakrishna W → Rajebhosale MD

Ramulu KS → Conicella C

Ranade $SA \rightarrow Sane AP$

Ranjekar PK → Rajebhosale MD

Rao AV → Ashfaq Farooqui M

Rasmussen JO, Waara S, Rasmussen OS: Regeneration and analysis of interspecific asymmetric potato - Solanum ssp hybrid plants selected by micromanipulation or fluorescence-activated cell sorting (FACS) 41

Rasmussen OS → Rasmussen JO Rebaï A, Blanchard P, Perret D, Vincourt

P: Mapping quantitative trait loci controlling silking date in a diallel cross among four lines of maize 451

Renard M → Chèvre AM

Revilla P, Vales MI, Malvar RA, Ordás A: Allozyme frequencies, heterozygosity and genetic distances following S₁ recurrent selection in two synthetic maize populations 1057

Rieseberg LH → Whitton J

Rines $HW \rightarrow Jellen EN$ Rines $HW \rightarrow Milach SCK$

Roa AC, Maya MM, Duque MC, Tohme J, Allem AC, Bonierbale MW: AFLP analysis of relationships among cassava and other Manihot species 741

Robert T → Lerceteau E

Roca W → Fregene M

Röder M → Börner A

Rodriguez $F \rightarrow Fregene M$

Roeckel-Drevet P → Vear F

Ronin YI → Sun GL

Roose ML → Fang DQ

Rosvall O → Zheng YQ

Roth R, Ebert I, Schmidt J: Trisomy associated with loss of maturation capacity in a long-term embryogenic culture of Abies alba 353

Rotino GL → Arpaia S

Rouppe van der Voort J, Wolters P, Folkertsma R, Hutten R, Zandvoort van P, Vinke H, Kanyuka K, Bendahmane A, Jacobsen E, Janssen R, Bakker J: Mapping of the cyst nematode resistance locus Gpa2 in potato using a strategy based on comigrating AFLP markers

Rousset M → Dubcovsky J Ruiz M → Nieto-Taladriz MT Russell JR, Fuller JD, Macaulay M, Hatz BG, Jahoor A, Powell W, Waugh R: Direct comparison of levels of genetic variation among barley accessions detected by RFLPs, AFLPs, SSRs and RAPDs 714

Sadanandam A → Ashfaq Farooqui M Saghai Maroof MA → Zhang Q Sakamoto K → Nishio T Salamini F → Leister D Salas A → del Rio AH Salesses G → Lecouls AC

Sane AP, Seth P, Ranade SA, Nath P, Sane PV: RAPD analysis of isolated mitochondrial DNA reveals heterogeneity in elite wild abortive (WA) cytoplasm in rice 1098

Sane PV → Sane AP

Sasaki T → Taguchi-Shiobara F

Sasaki T → Yano M

Sathish P, Gamborg OL, Nabors MW: Establishment of stable NaCl-resistant rice plant lines from anther culture: distribution pattern of K⁺/Na⁺ in callus and plant cells 1203

Sathyanarayanan PV → Mohan M Savolainen O → Kuittinen H

Schaeffer GW, Sharpe FT: Electrophoretic profiles and amino acid composition of rice endosperm proteins of a mutant with enhanced lysine and total protein after backcrosses for germplasm improvements 230

Schiemann A → Bauer E Schmidt J → Roth R

Schondelmaier J, Jung C: Chromosomal assignment of the nine linkage groups of sugar beet (Beta vulgaris L.) using primary trisomics 590

Schut JW, Qi X, Stam P: Association between relationship measures based on AFLP markers, pedigree data and morphological traits in barley 1161

Scienza A → Geuna F

Sedgley M → Maguire TL

Senior ML → Smith JSC

Seth P → Sane AP

Sharon D, Cregan PB, Mhameed S, Kusharska M, Hillel J, Lahav E, Lavi U: An integrated genetic linkage map of avocado 911

Sharpe FT → Schaeffer GW

Shaw DV: Trait mean depression for second-generation inbred strawberry populations with and without parent selection 261

Shelton BA → Yen HC

Shi CH, Zhu J, Zang RC, Chen GL: Genetic and heterosis analysis for cooking quality traits of indica rice in different environments 294

Shinoda K → Dubouzet JG

Shishido R → Fukui K

Shu H → Smith JSC

Sillanpää MJ → Kuittinen H

Simeone $M \to D$ 'Ovidio R

Singh DP → Verulkar SB

Singh KB, Ocampo B: Exploitation of wild Cicer species for yield improvement in chickpea 418

Singh M, Ceccarelli S, Grando S: Precision of the genotypic correlation estimated from variety trials conducted in incomplete block designs 1044

Singh $S \rightarrow Huang N$

Sirithorn P → Wongkaew P

Skøt L → Giddings G

Skroch PW → Spooner DM

Slee MU → Emebiri LC

Smalla K → Nielsen KM

Smith JSC, Chin ECL, Shu H, Smith OS, Wall SJ, Senior ML, Mitchell SE, Kresovich S, Ziegle J: An evaluation of the utility of SSR loci as molecular markers in maize (Zea mays L.): comparisons with data from RFLPS and pedigree

Smith OS → Smith JSC

Snape JW → Galiba G

Snow AA → Whitton J

Snowdon RJ, Köhler W, Friedt W, Köhler A: Genomic in situ hybridization in Brassica amphidiploids and interspecific hybrids 1320

Somers DJ → Bebeli PJ

Somers $DJ \rightarrow Zhou Z$

Spooner DM, Ugarte ML, Skroch PW: Species boundaries and interrelationships of two closely related sympatric diploid wild potato species, Solanum astleyi and S. boliviense, based on RAPDs 764

Srivastava MN → Mohan M

Stam P → Schut JW

Stiekema WJ → Metz PLJ

Subudhi P → Yang D

Sun GL, Fahima T, Korol AB, Turpeinen T, Grama A, Ronin YI, Nevo E: Identification of molecular markers linked to the Yr15 stripe rust resistance gene of wheat originated in wild emmer wheat, Triticum dicoccoides 622

Sun M → Chan KF Sunseri F → Arpaia S Sutka J → Galiba G

Taguchi-Shiobara F → Komatsuda T Taguchi-Shiobara F, Lin SY, Tanno K, Komatsuda T, Yano M, Sasaki T, Oka S: Mapping quantitative trait loci associated with regeneration ability of seed callus in rice, Oryza sativa L. 828

Takagi Y → Rahman SM Takaiwa F → Komatsuda T Tamhankar SA → Rajebhosale MD Tamulonis JP, Luzzi BM, Hussey RS, Parrott WA, Boerma HR: DNA marker analysis of loci conferring resistance to peanut root-knot nematode in soybean 664 Tanguy X → Chèvre AM

Tanksley SD \rightarrow Chunwongse J Tanksley SD \rightarrow Fulton TM

Tanno K → Taguchi-Shiobara F

Taramino G, Tarchini R, Ferrario S, Lee M,
Pe' ME: Characterization and mapping
of simple sequence repeats (SSRs) in
Sorghum bicolor 66

Tarchini R → Taramino G

Tauer CG → Raja RG

Temnykh $S \rightarrow Chen X$ Thelen $H \rightarrow Leister D$

Thomas CE → Wang Y-H

Timmerman-Vaughan GM → Gilpin BJ

Tingey S → Cerna FJ

Tinnangwattana T \rightarrow Wongkaew P

Tohme $J \rightarrow$ Fregene M Tohme $J \rightarrow$ Roa AC

Tomos AD → Price AH

Tourvieille de Labrouhe D → Vear F

Tuinstra MR, Ejeta G, Goldsbrough PB: Heterogeneous inbred family (HIF) analysis: a method for developing near-isogenic lines that differ at quantitative trait loci 1005

Tulsieram $L \rightarrow$ Cheung WY Turpeinen $T \rightarrow$ Sun GL

Ugarte ML \rightarrow Spooner DM Uhlig J \rightarrow Fulton TM

Ullah $Z \rightarrow Kabelka E$

Ullrich SE → Han F

Ur-Rahman H, James DJ, Hadonou AM, Caligari PDS: The use of RAPD for verifying the apomictic status of seedlings of Malus species 1080

Vales MI \rightarrow Revilla P van Norel A \rightarrow Janssen GJW Vanhouten W \rightarrow Jia MH

Vázquez JF → Nieto-Taladriz MT

Vear F, Gentzbittel I, Philippon J, Mouzeyar S, Mestries E, Roeckel-Drevet P, Tourvieille de Labrouhe D, Nicolas P: The genetics of resistance to five races of downy mildew (*Plasmopara halstedii*) in sunflower (*Helianthus annuus* L.) 584

Vedel F → Chagué V Vega SE → del Rio AH Vendramin GG → Bucci G

Verhaegen D, Plomion C, Gion JM, Poitel M, Costa P, Kremer A: Quantitative trait dissection analysis in *Eucalyptus* using RAPD markers: 1. Detection of QTL in interspecific hybrid progeny, stability of

QTL expression across different ages 597

Verkerk-Bakker B → Janssen GJW Verulkar SB, Singh DP, Bhattachary

Verulkar SB, Singh DP, Bhattacharya AK: Inheritance of resistance to podfly and podborer in the interspecific cross of pigeonpea 506

Vicario $F \rightarrow Bucci G$ Vincourt $P \rightarrow Rebaï A$

Vinke H → Rouppe van der Voort J

Virk DS \rightarrow Price AH

Vischi M, Marchetti S: Strong extracellular nuclease activity displayed by barley (*Hordeum vulgare* L.) uninucleate microspores 185

Voisin R \rightarrow Lecouls AC Voylokov A \rightarrow Korzun V

Vrebalov $J \rightarrow Yen HC$

Waara $S \rightarrow Nyman M$ Waara $S \rightarrow Rasmussen JO$ Wall $SJ \rightarrow Smith JSC$

Wang $G \rightarrow Yang D$ Wang $J \rightarrow Li HB$

Wang SI → Liu KD

Wang SL → Qi LL

Wang Y-H, Thomas CE, Dean RA: A genetic map of melon (*Cucumis melo* L.) based on amplified fragment length polymorphism (AFLP) markers 791

Wathelet $B \to Maquet A$ Waugh $R \to Russell JR$ Wendel $JF \to Cronn R$ Wenzel $G \to Michalek W$

Wesenberg DM → Han F

Westin $J \rightarrow Zheng YQ$ Weyen $J \rightarrow Bauer E$

White DWR → Hussain SW

Whitton J, Wolf DE, Arias DM, Snow AA, Rieseberg LH: The persistence of cultivar alleles in wild populations of sunflowers five generations after hybridization 33

Williams ER → Byrne M Williams WM → Hussain SW

Wittwer RF \rightarrow Raja RG Wolf DE \rightarrow Whitton J

Wolters P → Rouppe van der Voort J

Wongkaew P, Hanboonsong Y, Sirithorn P, Choosai C, Boonkrong S, Tinnangwattana T, Kitchareonpanya R, Damak S: Differentiation of phytoplasmas associated with sugarcane and gramineous weed white leaf disease and sugarcane grassy shoot disease by RFLP and sequencing 660

 $Xu CG \rightarrow Liu KD$ $Xu CG \rightarrow Zhang Q$ $Xu Y \rightarrow Chen X$

Yamashita S → Kishima Y

Yang D, Parco A, Nandi S, Subudhi P, Zhu Y, Wang G, Huang N: Construction of a bacterial artificial chromosome (BAC) library and identification of overlapping BAC clones with chromosome 4-specific RFLP markers in rice 1147

Yang $GP \rightarrow Zhang Q$

Yano M, Harushima Y, Nagamura Y, Kurata N, Minobe Y, Sasaki T: Identification of quantitative trait loci controlling heading date in rice using a high-density linkage map 1025

Yano M → Taguchi-Shiobara F

Yen HC, Shelton BA, Howard LR, Lee S, Vrebalov J, Giovannoni JJ: The tomato high-pigment (hp) locus maps to chromosome 2 and influences plastome copy number and fruit quality 1069

Yen $Y \rightarrow \text{Lee J-H}$ Yoneda $Y \rightarrow \text{Hisatomi } Y$

Zabel P \rightarrow Liharska TB Zamir D \rightarrow Fulton TM

Zandvoort van $P \rightarrow Rouppe van der Voort J$

Zang RC → Shi CH

Zeller $FJ \rightarrow Huang X Q$ Zhang $G \rightarrow Huang N$

Zhang Q → Li HB

Zhang $Q \rightarrow Liu KD$

Zhang Q, Liu KD, Yang GP, Saghai Maroof MA, Xu CG, Zhou ZQ: Molecular marker diversity and hybrid sterility in indicajaponica rice crosses 112

Zheng K-L → Zhuang J-Y

Zheng YQ, Lindgren D, Rosvall O, Westin J: Combining genetic gain and diversity by considering average coancestry in clonal selection of Norway spruce 1312 Zhou Z → Bebeli PJ

Zhou Z, Bebeli PJ, Somers DJ, Gustafson JP: Direct amplification of minisatelliteregion DNA with VNTR core sequences in the genus *Oryza* 942

Zhou ZQ → Zhang Q

Zhu J → Shi CH

Zhu $Y \rightarrow Yang D$

Zhuang J-Y, Lin H-X, Lu J, Qian H-R, Hittalmani S, Huang N, Zheng K-L: Analysis of QTL×environment interaction for yield components and plant height in rice 799

Ziegle J \rightarrow Smith JSC Zivy M \rightarrow David JL Zoro Bi I \rightarrow Maquet A Zou JS \rightarrow Li HB

Acknowledgements

The editors wish to thank the following referees for their assistance and evaluation of manuscripts submitted

S. B. Altenbach (Albany, USA)

K. Armstrong (Ottawa, Canada)

G. Backes (Freising, Germany)

D. Bartels (Köln, Germany)

H. S. Baryana, (Camden, Australia)

U. Bellin (Berlin, Germany)

J. L. Bennetzen (West Lafayette, USA)

J. A. Bietz (Peoria, USA)

T. Blake (Montana State University, USA)

A. Blechl (Albany, USA)

N. Borysjuk (New Brunswick, USA)

A. H. D. Brown (Oslo, Norway)

C. L. Brubaker (Canberra, Australia)

B. Burson (College Station, USA)

M. Capperdocia (Montreal, Canada)

D. Chen (Davis, USA)

A. E. Clarke (Parkville, Australia)

E. H. Coe (Columbia, USA)

D. de Vienne (Bordeaux, France)

P. B. Cregan (Beltsville, USA)

K. Devos (Norwich, UK)

R. L. Doudrick (Saucier, USA)

D. N. Duvick (Johnston, USA)

J. Dvorak (Davis, USA)

W. Ecke (Göttingen, Germany)

N. Ellis (St. Lucia, Australia)

M. Edney (Winnipeg, USA) M. Foolad (Penn University Park, USA)

G. Forbes (Quíto, Ecuador)

B. Foroughi-Wehr (Grünbach, Germany)

U. Frei (Freising, Germany)

W. Friedt (Gießen, Germany)

M. Gale (Norwich, UK)

C. Gebhardt (Köln, Germany)

A. Gierl (Garching, Germany)

W. Grüneberg (Göttingen, Germany)

W. Hanna (Tifiton, USA)

M. J. Havey (Madison, USA)

J. G. Hawkes (Birmingham, UK)

C. Hedgcoth (Manhattan, USA)

J. P. Helgeson (Madison, USA)

D. L. Hoffmann (Aberdeen, USA)

N. Huang (Los Banos, Philippines)

A. Jahoor (Freising, Germany)

N. G. K. Jones (Harpenden, USA)

D. B. Jones (Madison, USA)

S. Kaeppler (Madison, USA)

J. Kelly (East Lansing, USA)

S. J. Knapp (Corvallis, USA)

W. Köhler (Gießen, Germany)

M. P. Kubisiak (Rochester, USA) G. S. Khush (Los Banos, Philippines)

L. M. Lagrimini (Columbus, USA)

F. Léon (Bonn, Germany)

R. F. Line (Pullman, USA)

W. Link (Göttingen, Germany)

A. Lukaszewski (Riverside, USA)

G. Lookhart (Manhattan, USA)

D. J. MacKill (Davis, USA)

C. Marakoff (Oxford, USA)

T. McKnight (College Station, USA)

Table of contents

T. Miedaner (Stuttgart, Germany)

P. Miklas (Prosser, USA)

G. A. Moore (Gainesville, USA)

J. Myers (Corvallis, USA)

D. B. Neale (Berkeley, USA)

C. Nelson (Ithaca, USA)

A. Paterson (College Station, USA)

A. Pepper (College Station, USA)

N. Pogrebuyak (Princeton, USA)

W. Powell (Dundee, UK)

M. Querci (Lima, Peru)

L. Rieseberg (Bloomington, USA)

F. J. Seitzer (Einbeck, Germany)

M. Sigareva (Ithaca, USA)

C. Simon (Grünbach, Germany)

P. H. Sisco (Raleigh, USA)

C. Smith (Guelph, Canada)

C. W. Stuber (Raleigh, USA)

K. Suzuki (Tokio, Japan)

R. Tarchini (Milano, Italy)

N. Weeden (Geneva, USA)

H. VanTang (Gainesville, USA)

T. Wehner (Raleigh, USA)

J. F. Wendel (Ames, USA)

Y. Yen (Brookings, USA)

F. J. Zeller (Freising, Germany)

as well as the assistance of Mrs. Ritta Wehrer at the editorial office.